Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Figs. 5(a) and 5(b) and replaces the original sheet with Figs. 5(a) and 5(b).

Attachment: Replacement Sheet (Figs. 5(a) and 5(b))

REMARKS

Claims 1-12 are pending in this application. By this Amendment, Figs 5(a) and 5(b) are replaced pursuant to the attached drawing sheet, and the specification and claims 1-12 are amended. Figs. 5(a) and 5(b) are replaced to incorporate numerical labels. Claims 1 and 10 are amended to recite features supported in the specification at, for example, paragraph **[0019]**. Claims 2-9 are amended only to conform them to the renaming of elements of claim 1 and have no effect on patentability, and are non-narrowing. No new matter is added by any of these amendments.

Reconsideration based on the following remarks is respectfully requested.

I. The Drawings Satisfy All Formal Requirements

The Office Action objects to the drawings regarding support for claims 11 and 12. Figures. 5(a) and 5(b) are replaced pursuant to the attached drawing sheet to add numerical labels for the data signals (30), a hatched part (32), an unhatched part (34), a full scanning frame (36) and a partial scanning frame (38). These numerical labels are identified in the specification at paragraphs **[0017]** and **[0031]**, as amended. The amendments are not new matter as the features were shown in the drawings and described in the specification as filed, but only previously not labeled. Withdrawal of the objection to the drawings is respectfully requested.

II. The Claims Satisfy the Requirements under 35 U.S.C. §112, second paragraph

The Office Action rejects claims 11 and 12 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 11 and 12 recite features clearly described in paragraph **[0017]** of the specification. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph is respectfully requested.

III. Claims 1-12 Define Patentable Subject Matter

The Office Action rejects claims 1-3, 7 and 10 under 35 U.S.C. §103(a) over U.S. Patent No. 6,771,240 to Inoue *et al.* (incorrectly identified in the Office Action as No. 6,771,249, hereinafter "Inoue") in view of U.S. Patent No. 5,867,140 to Rader; claims 4-6 and 8 under 35 U.S.C. §103(a) over Inoue and Rader and further in view of U.S. Patent No. 6,236,380 to Wani *et al.* ("Wani"); and claim 9 under 35 U.S.C. §103(a) over Inoue, Wani and Rader and further in view of U.S. Patent No. 5,805,121 to Burgan *et al.* ("Burgan"). These rejections are respectfully traversed.

Inoue and Rader, alone or in combination, do not teach or suggest a method of driving a plurality of display elements, which are arranged in a matrix and which constitute a region to make each display element display in the region, a gray level that the display element should display through at least one frame period of a plurality of frame periods, by using a plurality of scanning lines for supplying a scanning signal that selects the display element and a plurality of data lines for supplying a data signal that specifies the gray level, the method comprising a partial display mode including a first supplying step of supplying the scanning signal to certain scanning lines of the plurality of scanning lines, the certain scanning lines corresponding to display elements included in a certain part of the region for displaying the gray level, the first step including supplying a data signal that specifies the gray level to the plurality of data lines corresponding to the display elements included in the certain part of the region; a second supplying step of supplying, during the first supplying step, a scanning inhibition signal that prohibits supply of the scanning signal to other scanning lines other than the certain scanning lines, the other scanning lines corresponding to display elements included in another part of the region other than the certain part of the region; and a third supplying step of supplying the scanning signal to both the certain scanning lines and the other scanning lines, the third step including supplying a data signal that specifies the gray

level to the plurality of data lines corresponding to the display elements including in the certain part of the region, and supplying a non-display signal that specifies a non-display voltage level to the plurality of data lines corresponding to the display elements included in the other part of the region, as recited in claim 1.

Also, Inoue and Rader, alone or in combination, fail to teach or suggest an electronic apparatus in which, to display a gray level to be displayed through at least one frame period of a plurality of frame periods specified by image data, a plurality of scanning lines that supply scanning signals to a region comprising a plurality of display elements arranged in a matrix and a plurality of data lines that supply data signals to the region are used to drive the plurality of display elements, thereby displaying the gray level, the scanning signals selecting the plurality of display elements, and the data signals specifying gray levels to be displayed by the plurality of display elements, the electronic apparatus comprising an input circuit that inputs information to specify the image data; a production circuit that produces the image data according to the information inputted from the input circuit; and a display circuit that displays the image data produced by the production circuit, the display circuit supplying the scanning signals to certain scanning lines of the plurality of scanning lines and a data line signal, the certain scanning lines corresponding to display elements included in a certain part of the region for displaying the gray level, the data signal specifying the gray level to the plurality of data lines corresponding to the display elements included in the certain part of the region, a scanning inhibition signal that prohibits supply of the scanning signal to other scanning lines other than the certain scanning lines, the scanning inhibition signal being supplied concurrently with the scanning signals being supplied to certain scanning lines, the other scanning lines corresponding to display elements included in another part of the region other than the certain part of the region, and the scanning signals to both of the certain scanning lines and the other scanning lines of the plurality of scanning lines, to make the gray level

undisplayed and the data signal that specifies the gray level to the plurality of data lines corresponding to the display elements included in the certain part of the region and including supplying a non-display signal that specifies a non-display voltage level to the plurality of data lines corresponding to the display elements included in the other part of the region, as recited in claim 10.

Instead, Inoue discloses a display LCD panel 100 with a scanning line driving circuit 350 and a data line driving circuit 250. In particular, Inoue teaches pixels 116 at the intersections of data lines 212 and scanning lines 312, and a control circuit 400 that supplies clock signals. The control circuit 400 includes a gradation level control signal generating circuit 4008 for representing gray scale levels that receives a low frequency pulse signal from a frequency dividing circuit 4004 and transmits a gray scale timing pulse GCP for displaying within a pixel region corresponding to scanning lines Y41 through Y60 (col. 7, line 57 – col. 8, line 15, col. 10, lines 32-49, col. 13, line 45 – col. 14, line 21, col. 23, lines 45-55 and Figs. 1, 3, 5 and 6 of Inoue).

However, Inoue fails to teach or suggest a scanning inhibition signal that prohibits the scanning signal to other scanning lines other than certain scanning lines, as provided in Applicant's claimed features. Rather, Applicant asserts that Inoue clearly states that scanning is performed for all scanning lines, even during partial display (col. 14, lines 5-9 of Inoue), thus teaching away from Applicant's claimed features.

In addition, Rader does not compensate for the deficiencies of Inoue but rather discloses a display system 300 having a control circuit 301 coupled to a liquid crystal display panel 200. In particular, Rader teaches the display panel 200 having a full screen area 303 within which is a partial display field 305 for a second operation mode (col. 2, lines 21-30 and Fig. 3 of Rader). Also, Rader appears to teach all scanning lines being scanned (col. 7, lines 26-31 of Rader), thus also teaching away from Applicant's claimed features.

Further, there is no motivation to combine features related to the gray signal timing pulse of Inoue with the partial display field of Rader, nor has the Office Action established sufficient motivation for a *prima facie* case of obviousness. Even assuming that motivation to combine the applied references is established, the combination fails to teach or suggest Applicant's claimed features.

Wani does not compensate for the deficiencies of Inoue and Rader outlined above for claim 1. Nor does Wani teach, disclose or suggest the additional features recited in claims 4-6 and 8 for subfield periods. Instead, Wani discloses a method of displaying graduation in a plasma display panel. In particular, Wani teaches scanning electrodes arranged in fields and controlled using timing charts (col. 3, lines 10-39, 57-65, col. 4, lines 49-57 and Figs. 1, 3 and 5 of Wani).

Burgan also does not compensate for the deficiencies of Inoue and Rader outlined above for claim 1. Nor does Burgan teach, disclose or suggest the additional features recited in claim 9 for making the display element undriven to the data line when supplying scanning signals to the other scanning lines. Instead, Burgan discloses a liquid crystal display turnoff method. In particular, Burgan teaches applying a two-level voltage resulting in a substantially zero average value insufficient to turn the pixel on (col. 4, lines 32-54 and Figs. 5-6 of Burgan).

Further, there is no motivation to combine features related to the gray signal timing pulse of Inoue and the partial display field of Rader with the timing charts of Wani and/or the bi-level voltage of Burgan. Further, the Office Action has not established sufficient motivation for a *prima facie* case of obviousness. Even assuming that motivation to combine the applied references is established, the combination fails to teach or suggest Applicant's claimed features.

A *prima facie* case of obviousness for a §103 rejection requires satisfaction of three basic criteria: there must be some suggestion or motivation either in the references or knowledge generally available to modify the references or combine reference teachings, a reasonable expectation of success, and the references must teach or suggest all the claim limitations (MPEP §706.02(j)). Applicant asserts that the Office Action fails to satisfy these requirements with Inoue, Rader, Wani and Burgan.

For at least these reasons, Applicant respectfully asserts that the independent claims are now patentable over the applied references. The dependent claims are likewise patentable over the applied references for at least the reasons discussed, as well as for the additional features they recite. Consequently, all the claims are in condition for allowance. Thus, Applicant respectfully requests that the rejections under 35 U.S.C. §103 be withdrawn.

IV. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Gerhard W. Thielman
Registration No. 43,186

JAO:GWT/gwt

Attachment:
Replacement Sheet (Figs. 5(a) and 5(b))

Date: July 18, 2005

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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